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New Mexican *Acronyches* and *Parataracticus*

(Diptera: Asilidae)¹

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Genus *ACRONYCHES* Williston

Acronyches Williston, S. W. 1908. *Manual of North American Diptera*, p. 388, fig. 103. Hermann, F. 1921. *Arch. Naturgesch.*, Abt. A, 86: 118-122.

TYPE OF GENUS.—*Acronyches willistoni* Hermann, 1921.

The position and status of the rare genus *Acronyches* Williston (Dasygogoninae: Asilidae) has been puzzling ever since its description because of its close but superficial resemblance to Leptogastrinae. Williston (1908) erected the genus only on the figure of an undescribed Brazilian asilid, stating that the genus represented a transition between the Dasygogoninae and Leptogastrinae. The types of *Acronyches willistoni* Hermann and of *A. imitator* Hermann, both females, were seen by me at the Zoologische Sammlung des Bayrischen Staates, Munich. *A. fenestralis* Hermann was not located. The three species are from Paraguay. Hermann misidentified a specimen of *Acronyches* from Costa Rica at the Naturhistorisches Museum, Vienna, as a cotype of *A. willistoni*. Also, Hermann mislabeled a manuscript species of

¹ Financial support by National Science Foundation grant GB-4541 is acknowledged.

Leptogaster at Munich as *Acronyches*. Hull (1962) had difficulty at the subfamily level, placing *Acronyches* both in Leptogastrinae and in Dasypogoninae, but intending to assign it to Leptogastrinae (Martin, 1965).

Acronyches Williston is redescribed here on the basis of Hermann's specimens at Munich and Vienna, and on three new species from Yucatan, Morelos, and Nayarit, Mexico. These are the first records of *Acronyches* from Mexico.

Acronyches Williston belongs to the subfamily Dasypogoninae (Asilidae) rather than to the subfamily Leptogastrinae. Six species of *Acronyches* range from 20–30 mm in length. The abdomen superficially resembling that of very large *Leptogaster* Meigen; without pulvilli and alulae greatly reduced as in Leptogastrinae; empodium very short, tapering to a blunt point. The following characters of *Acronyches* Williston do not occur in Leptogastrinae except as noted: face forming a triangle with the ocellar tubercle as the apex, the eyes not touching at the vertex; laterally deep facial grooves below the level of the mystax; strong bristles in mystax, weaker and shorter facial bristles; somewhat swollen lobes on anterior margin of the posterior pronotum well separated; no pit in the mesothorax over phragma 1; tuft of pile on episternum; abdomen clavate (true of some Leptogastrinae); hypandrium and basistyli of male coalesced except apicolaterally (partially or wholly coalesced in 75% of Leptogastrinae); pair of lateral processes closely associated with the aedeagus, epandria triangular, shorter than proctiger; aedeagus a single tube of large diameter, tapering to the apex from a more or less hidden base (also occurs in Leptogastrinae); ovipositor a short tube of small diameter which may or may not be partially sclerotized; sternite 2 without the fenestra of Leptogastrinae; *Acronyches maya* Martin, new species, with a shallow crescent groove on sternite 2 which does not form a fenestra, but superficially resembles one; anal cell petiolate (true in one genus of Leptogastrinae).

***Acronyches maya* Martin, new species**

MALE.—Length 30 mm. Head black, face cherry red; face and occiput grayish white tomentose, front and vertex brown tomentose; antennal segment 1 dark red, polished, about one-fourth longer than segment 2, the latter reddish yellow, segment 3 missing; vestiture black.

Thorax black to reddish, posterior pronotum and posterior humeri, and median stripe, reddish; grayish white tomentose except anterior humeri reddish brown tomentose, narrow geminate blackish brown longitudinal stripe extending to transverse suture, a very narrow median dark brown stripe separating the geminate stripe, and about as long, a narrow brown stripe along ventral margin of meso-

thorax; scutellum blackish, white pollinose on disc, short hair on posterior margin; metapleura red, mesopleura black, gray tomentose above, brown below; vestiture black, tuft of brownish red pile on episternum.

Abdomen black, posterior half of tergites 2-3 yellow; tergite 2 anteriorly white tomentose, medially a brownish tomentose triangular spot, posterior margin brownish tomentose, tergite 3 similar with a narrow gray anterior band, grayish laterally, tergite 4 brown pollinose, anteriorly and posteriorly narrowly gray, tergite 5 brown pollinose, some gray dorsally, tergites 6-7 laterally mixed gray and brown tomentose, narrowly on posterior margin, tergite 8 dorsally polished black, laterally mixed gray and brown tomentose, but narrowly polished along the posterior margin; vestiture sparse, recumbent long brownish hairs; hypandrium and basistyli coalesced except some differentiation apically and apicolaterally, genitalia black, most of hypandrium yellow, vestiture yellowish.

Wings reddish brown.

Legs cherry red to blackish, hind femur yellow apicodorsally, hind tibiae anteriorly and posteriorly with yellow stripes.

FEMALE.—Unknown.

Holotype Male.—CHICHEN ITZA, YUCATAN, MEXICO (E. T. Thompson); in Chicago Museum of Natural History.

***Acronyches rarus* Martin, new species**

MALE.—Length 25 mm. Head black; oral margin and corners of oral margin densely white tomentose fading to reddish brown, front reddish brown, a yellowish spot below ocellar tubercle, occiput yellowish tomentose, reddish at some angles of view, a white stripe from the ocellar tubercle to the neck; about 12 mystax bristles, longer medially, rather sparse weaker bristles on face reaching antennae, occipital bristles red; antennal segment 1 polished red, segments 2-3 yellowish, light reddish brown tomentose, segment 2 subequal to segment 1, segment 3 twice as long as segment 1, style shorter than segment 2, with a red apical spine.

Thorax dorsally red, pleura black; a wide grayish median stripe separated by a very narrow median black stripe from pronotum to the metanotal declivity, laterad two wider brown longitudinal stripes, constricted opposite spiracle 1, laterad to brown stripes a blackish spot, laterally thinly gray pollinose; setae black, bristles reddish; scutellum reddish, thinly gray pollinose, without vestiture; pleura reddish brown, a patch of black hypopleural hairs.

Wings dark reddish brown, with a lighter spot apicad to discal crossvein, anterior third longitudinal vein rises from the third longitudinal vein as a half loop.

Legs dark reddish, hind tibiae darker with a narrow yellow band basally, four posterior metarsi yellow, without pulvilli, empodium short, thick, tapered apically, hind femur anteroventrally near apex with an elongate patch of erect yellowish hair longer than other vestiture on hind femur, hind tibiae apicad and anteroventrally covered with dense long yellow hair.

FEMALE.—Unknown.

Holotype Male.—YAUTEPEC, MORELOS, SOUTHCENTRAL MEXICO, 13 July 1963 (F. D. Parker, L. A. Stange), in the University of California, Davis.

Acronyches westcotti Martin, new species

MALE.—Length 23 mm. Head black; face grayish white tomentose, brown on lower oral margin, front brown tomentose with a white spot before ocellar tubercle, occiput blackish brown tomentose, orbitals narrowly gray, a faint bluish gray stripe from ocellar tubercle to the neck; mystax of long black bristles, hairs on face, and occipital bristles black; antennal segment 1 polished black, segments 2–3 and style dark brown tomentose, segment 3 over four times as long as segment 1, linear, slightly expanded apically, several bristles dorsally near apex, style about as long as segment 1, spine on apex.

Thorax thinly gray pollinose with a mixture of brown, two broad longitudinal stripes widely separated and extending to scutellum, a thin brown stripe between them on the mesonotal declivity; vestiture black; scutellum black, white pollinose, posterior margin mostly brown tomentose, no vestiture; pleura black, dark brown tomentose, a patch of weak black hypopleural hair.

Abdomen black; tergite 2 grayish white tomentose, intermixed with small amounts of brown, black triangle with base extending across the tergite on posterior two-thirds, tergites 3–4 grayish tomentose, narrowly basally, black triangle with a very broad base covering dorsum, tergite 5 black, narrowly gray basad, posteriorly two rather faint gray spots, tergites 6–7 gray dorsally, black laterally, tergite 7 posteriorly with two small polished black spots; male genitalia black.

Wings dark brown, light spots in the first and second submarginal cells, anal cell short and petiolate.

Legs blackish red to black, polished, fore femora dark cherry red, hind tibiae with yellow basal bands, metatarsi on hind legs mostly red ventroapically.

FEMALE.—Unknown.

Holotype Male.—20 MILES SOUTHEAST OF IXTLAN DEL RIO, NAYARIT, WESTERN MEXICO, 22 July 1963 (R. L. Westcott); type in the University of California, Davis. This species is named for the collector, Mr. R. L. Westcott.

Genus **PARATARACTICUS** Cole

Parataracticus Cole, F. R. 1924. The Pan-Pacific Ent., 1: 7–13. Martin, Chas. H. 1955. Jour. Kansas Ent. Soc., 28: 116–120. Wilcox, Joseph. 1967. Jour. Kansas Ent. Soc., 40: 13–16.

TYPE OF GENUS.—*Parataracticus rubidus* Cole, 1924.

Parataracticus arenicolus Martin, new species

The narrow grayish pollinose band across the anterior margins of tergites 3–5 on both sexes, and the median small triangle on these tergites readily separate *P. arenicolus* Martin, new species, from *P. niger* Martin which is without such markings.

Parataracticus niger Martin ranges from the type locality, Riverside County, California into northern Baja California, Mexico; *P. arenicolus* Martin replaces *P. niger* in the southern region of Baja California.

MALE.—Length 6 mm. Head black; face and front white tomentose, more

grayish near vertex, occiput more brown than gray above, gray below; mystax, facial hair, and hair on antennae white, ocellar and occipital bristles reddish; antennal segments 1 and 2 reddish, together about half as long as segment 3 and its short style, segment 3 and style black with short brown microchaetae uniformly spaced, short spine at base of style.

Thorax black, anterior humeri red, posterior humeri dark red; geminate brown median stripe from anterior margin of mesothorax to metanotal declivity, separated medially by a narrow brownish white stripe, brown and white pollinose patterns laterally; 4-5 long bristles on anterior humeri, sparse long reddish brown dorso-centrals on meso- and metathorax; scutellum with disc grayish brown tomentose, posterior margin polished, with six long strong reddish brown bristles; pleura light brown to gray tomentose with two polished spots below wing base narrowly joined, vestiture white.

Anterior abdominal tergites black, reddish laterally, becoming gradually more reddish, posterior three segments red, anterior margins of tergites 3-5 with a narrow gray pollinose stripe across anterior margins, tergites 2-5 anteriorly with small gray tomentose triangular spots; three whitish bristles on posterior ventral corners of tergite 2, and two on tergite 3.

Wings very slightly infuscated, mostly hyaline, all cells open.

Legs red, dorsally femora black, hind tibiae black dorsally, and ventrally, fore tibiae red, apical tarsal segments black.

FEMALE.—Similar to male; abdomen more reddish, antennal segment 3 slightly narrower.

Holotype Male.—LOS FRIALES, BAJA CALIFORNIA, MEXICO, 18 March 1853 (Seftin expedition to Gulf of California, P. H. Hurd). Allotype female, same data. Paratypes: 18 males, 9 females, same data as for holotype. Holotype in California Academy of Sciences.

NOTE.—The tergal pollinose fasciae rub off easily, so that the pattern appears to change from specimen to specimen. The anterior narrow gray stripe across tergite 3 may be hidden beneath tergite 2.

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